**MASTERING THE LATERAL SHUFFLE**

from

Athletes Acceleration Newsletter

Link: http://www.athletesacceleration.com/mastering-the-lateral-shuffle/

The lateral shuffle pattern has been a staple for basketball players and lineman for decades now. Although it’s generally only executed momentarily in most sporting environments, it’s still essential that ANY athlete perfect this exercise to the best of their ability to ensure no deficiency and increase their odds of athletic success. With the high prevalence of excessive lordosis or Anterior Pelvic Tilt (APT) still present in athletes everywhere this drill serves as a natural prehab/rehab technique for anyone, and in my decade’s worth of experience training hundreds of athletes of all sport types, I still feel that all of the involved musculature and just general functioning in the frontal plane of motion is lacking, and this lends into how well someone performs with other movements in other directions as well.

In this article I’m going to break down this exercise into its key components and provide you with some strong scientific evidence for why you should practice each technique, and then leave you with a proper demonstration of how to perform the exercise at the end. We can dissect the lateral shuffle into 6 elements.

**#1-Athletic Stance**

**#2-Proper Hip Height**

**#3-Arm Drive**

**#4-Lead leg mechanics**

**#5-Trail leg mechanics**

**#6-Stride Length**

**ATHLETIC STANCE**

I believe sound cueing of the athletic stance can best be taught when the coach takes an observational view from the side of the athlete. Signaling the athlete to “stack the joints” seems to work every time in my experience. Starting from the neck and working our way down, the cervical spine should be in a neutral alignment. Next, the trunk should aligned at a 45 degree angle with the rest of the spinal column in neutral. The hips are pushed back (hinged), the shins are vertical and the heels are resting down on the ground. When all of this completed, you should be able to draw a straight line from the athlete’s shoulders down through their knee caps and toes. Arm positioning is still controversial, but I prefer to have athletes position their upper limbs with their hands on the front of their thighs. I’ve observed a potentially stronger countermovement out of the start stance since the arm musculature is placed under a bit more of a stretch in this position. Here is exactly what your stance should look like….

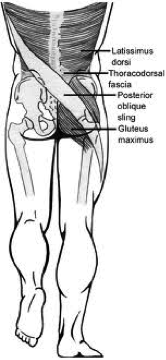


**HIP HEIGHT**

Creating and sustaining solid hip height is one of the most common errors that I’ve witnessed with the shuffle movement. Too often athletes want to raise their hips and extend their knees when they attempt to move, and I suppose this is a natural compensation due to anterior pelvic tilt and quad dominance which occurs for a variety of reasons. Cue athletes to get in the joint stacked position and “level the hips” while shuffling.

**ARM DRIVE**

I found a study as it relates to the contribution arm drive provides in both the vertical jump and sprint pattern which are both obviously linear based movements, but I think the same validity could be granted to the lateral shuffle as well. A researcher by the name of Hinrichs found that arm drive in a sprint contributes to over 10% of vertical force production which is significant for the development of several other effective sprinting techniques (lift, hip height, stride length, etc.). Comparable numbers where reported for the vertical jump also. The arms feed our legs and vice versa. When considering lateral human motion the arms won’t directly feed energy in the intended direction as much as they do with sprinting and jumping, but that doesn’t mean they aren’t increasing structural production elsewhere. Enter “The Posterior Oblique Sub-System.”



This independent system of our anatomy helps increase the speed of any athletic based movement including the shuffle. When we drive our arms correctly (up and back), this feeds the opposite side glutes to fire more into the ground. Don’t worry, I will include a video of what proper arm drive should look like at the end. When this happens we will accelerate faster and generate even more of a reflex from our muscles creating a strong chain reaction.



* Notice that my right foot is turned out towards the right where I’m going to initiate movement. You will always be more stable, stronger, and quicker with this type of foot positioning!

**LEAD LEG MECHANICS**

I first heard this subtle and very influential technique from renowned speed coach Lee Taft years ago and he was absolutely right. Lee mentioned that when we externally rotate the inside leg in the intended direction approximately 45 degrees, we create a naturally stronger line of pull in the glutes and hamstrings, while increasing our base of support in the process. He called this technique a “Directional Step.”

Notice that my right foot is turned out towards the right where I’m going to initiate movement. You will always be more stable, stronger, and quicker with this type of foot positioning!

This function comes naturally to many athletes when you watch it, but not for some so please pay attention. Quite simply, when the foot is forward we will recruit the groin/adductor muscle group more. Unfortunately, these muscles are not as naturally big and strong as the glutes and hamstrings. I also think keeping the foot forward versus turned out may feed overstriding, since the body would have to overcompensate somehow for the disadvantage in foot position and move longer to get the same level of strength it would achieve with the foot turned out.

**TRAIL LEG MECHANICS**

Trail leg mechanics are also very important when it comes to applying a faster shuffle movement. Hip Abduction is naturally lacking in most athletes and individuals if you want to manually muscle test, so it becomes imperative to ensure that this sub-movement is present in the overall pattern. Generating a massive push-off and fully extending both the knee and especially the outer or lateral aspect of the hip is key. I think this movement component is best taught specifically via standard lateral band walks.

**STRIDE LENGTH**

Stride length has rapidly become another critical feature to a more efficient and fluid shuffle pattern. Too often athletes will bring their feet to close together after their push-off into the ground with the trail leg has been completed. Not only does this take more time, but it decreases control and stability and predisposes the athlete to ankle inversion which is the most common cause of ankle sprain. I know there are several other issues associated with sprains (injury history, proximal glute weakness, overall foot positioning, and more), but this error in form definitely doesn’t help matters. Once you perfect the directional step which was discussed earlier, the other thing you can do is make sure that the athlete doesn’t let their feet come closer than shoulder width after their return from push-off.

**SCIENTIFIC REFERENCES:**

#1-Hinrichs, R. Cavanaugh, P, and Williams, K. Upper Extremity Function in Running. Journal of Biomechanics 3: 222-241, 1987.